PD/A CRSP Seventeenth Annual Technical Report

Fate of Methyltestosterone in the Pond Environment: Detection of MT in Pond Soil from a CRSP Site

Ninth Work Plan, Effluents and Pollution Research 2B (9ER2B)
Abstract

Martin S. Fitzpatrick and Wilfrido M. Contreras-Sánchez
Department of Fisheries and Wildlife
Oregon State University
Corvallis, Oregon, USA

Gabriel Márquez-Couturier
División Académica de Ciencias Biologicas
Universidad Juárez Autónoma de Tabasco
Villahermosa, Tabasco, Mexico

Karen Veverica
Department of Fisheries and Allied Aquacultures
Auburn University, Alabama, USA

Carl B. Schreck
Oregon Cooperative Fishery Research Unit
Biological Resources Division—U.S. Geological Survey
Department of Fisheries and Wildlife
Oregon State University
Corvallis, Oregon, USA

Abstract

The following study will examine if 17α-methyltestosterone (MT) persists in the environment after its use for masculinizing Nile tilapia at one or more PD/A CRSP sites. Experiments are currently underway at the Universidad Juárez Autónoma de Tabasco, Mexico. Fry have been treated with a masculinizing dose of MT (60 mg kg^{-1}) for four weeks beginning at the initiation of feeding. Water and soil samples were taken from the pond before the onset of treatment and one day after the end of treatment; samples will also be taken at four weeks after the end of treatment. Concentrations of MT will be determined by radioimmunoassay. If possible, a similar sampling design will be applied to the Sagana Station, Kenya, with subsequent analysis of samples at Oregon State University.

Cite as: [Author(s), 2000. Title.] In: K. McElwee, D. Burke, M. Niles, X. Cummings, and H. Egna (Editors), Seventeenth Annual Technical Report. Pond Dynamics/Aquaculture CRSP, Oregon State University, Corvallis, Oregon, [pp. ___.]